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Agricultural Education

The Ten Commandments of Success

1. **Work Hard.** Hard work is the best investment a man can make.
2. **Study Hard.** Knowledge enables a man to work more intelligently and effectively.
3. **Have Initiative.** Ruts often deepen into graves.
4. **Love Your Work.** Then you will find pleasure in mastering it.
5. **Be Exact.** Slipshod methods bring slipshod results.
6. **Have the Spirit of Conquest.** Thus you can successfully battle and overcome difficulties.
7. **Cultivate Personality.** Personality is to a man what perfume is to a flower.
8. **Help and Share with Others.** The real test of business greatness lies in giving opportunity to others.
9. **Be Democratic.** Unless you feel right towards your fellow-men you can never be a successful leader of men.
10. **In All Other Things Do Your Best.** The man who has done his best has done everything. The man who has done less than his best has done nothing.

—Charles M. Schwab.

Vocational agriculture may make greater contributions during the next 25 years thru teaching farmers to work together effectively than thru promoting greater individual efficiency.—H. M. Hamlin.

EDITORIAL COMMENT

AGRICULTURAL EDUCATION

A monthly magazine for teachers of agriculture. Managed by an editorial board chosen by the Agricultural Section of the American Vocational Association and published at cost by the Meredith Publishing Company at Des Moines, Iowa.

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FUTURE FARMERS

YOUNG Howard Strother of Mount Pleasant is rapidly becoming recognized as one of the state's outstanding agriculturists. He is not conspicuous because of the extensiveness of his operations, but for his skill in small scale performance.

Strother is one of five boys just elected to the rank of Lone Star farmer by the Texas Association of Future Farmers of America. He is president of the Mount Pleasant chapter of the association, and past president of the state association.

Boys who are following the course of Howard Strother merit attention by all who are puzzled over the future of agriculture in the United States. Unless all signs are misleading, they are doing more to promote the welfare of this basic American industry than all the politicians who are working for farm legislation.

Heretofore farm life has not proved attractive to ambitious young men. Success in life has usually been associated with careers in the city. Farm boys by the million have journeyed cityward to seek their fortunes. But the younger generation is beginning to feel that urban "success" has its drawbacks as well as advantages.

Just at present the young man who desires to go into business for himself, to lead a career of independence, has a more favorable opporunity on the farm than anywhere else. The chances for starting a small enterprise in a city and succeeding are becoming slimmer every day. Farm boys who cherish their independence should stay on the farm.

Of course, even on the farm, independence cannot be gained and held without skill and determined effort. Farming is no profession for the young man who desires to get rich quick. It is no profession for persons who like the "strenuous life." It is a profession that requires patience, persistence, and willingness to be content with slow accumulation.

At present the farmers are faring none too well, but, to a large extent, their distress is due to the fact that they depend too much on certain cash producing crops. They find themselves at the mercy of the buying public. The markets have failed and they find themselves in debt. Having neglected to prepare themselves for living on their own production they are little better off than city wage earners. Farmers like young Howard Strother may be depended upon to follow a wiser course.—*From The Times Herald, Dallas, Texas.*

TEACHING CO-OPERATION IN SCHOOL

WE HAVE been a little doubtful about teaching co-operative marketing in our secondary schools. There is so much talk that seems to picture a co-operative as a sort of farmers' trust, and that fails to recognize the importance of democratic control, that we have feared boys and girls might be taught to value the non-essential, or even the detrimental features of so-called co-operative marketing.

A report from a vocational agriculture class in Illinois makes us more hopeful. Instead of discussing the Farm Boards methods, the instructor suggested that the boys in the animal husbandry class go together in handling broilers. They each bought from the same hatchery, purchased commercial feed together, and planned to sell on the same day.

By the time these boys sell their broilers, they will have learned a lot about pooling, co-operative buying, delegating authority, and a number of other things. With this background, they will be ready to study the local co-operatives and other co-operative projects with more understanding. —*From Wallaces' Farmer.*

HONORING THE BOY FARMERS

OREGON sends a "boy farmer" to Honolulu on Hawaii's invitation, Kenneth Pettibone of Corvallis is met with leis by school officials and the president of the Hawaii F. F. A., taken on a tour of the islands, feted by his fellow members of the Future Farmers of America. Presently, Hawaii will send a boy farmer to the national F. F. A. meeting, visiting Oregon enroute to reciprocate for young Mr. Pettibone's Hawaii trip.

Truly, farming is coming into the recognition and prominence it deserves. Not so long ago, about the only schoolboys to be sent on intersectional trips were athletes. Now there's nothing the matter with intersectional sports events —not a thing to say against college or high school teams taking an occasional jaunt if it doesn't interfere with their studies. Travel can be just as much educative for football players as for retired capitalists and inland "trippers." The point is that Hawaii is now beginning to give recognition to champion young farmers as it gives recognition to champion young booters of the inflated pigskin.

The Future Farmers of America is a great institution. It is founded on the theory that organization of student farmers is as valuable as organization of student athletes or debaters or signers or fraternities. It gives a high place to the youth who aims to till the soil for a livelihood. It extends coveted recognition to the lad who intends to be a producer of foodstuffs.

In Hawaii the F. F. A. is already a potent force in the lives of hundreds of youths—and it is still in its infancy. The visit of Kenneth Pettibone of Oregon will be a stimulus to Hawaii's "future farmers" and the wise publicity given this exchange of visits will be good advertising both for Oregon and for Hawaii.—*From The Honolulu Star-Bulletin.*

ARE YOU READY?

IT WON'T be long now! The so-called summer vacation is fast putting itself behind us and our boys will soon be trooping into the classrooms and shops for another session of school.

In another month or less in most sections of the country, teachers will again have regular classes to meet, laboratory work to plan, and the usual routine to follow. This is an inevitable situation and it behooves us to be ready to meet it.

If not already accomplished, there are certain matters which should be attended to before school opens. In the first place, our course plans for the year should be carefully and completely formulated. Based on this course layout, the teaching plans may be made out in advance, rather than the night before the unit of subject matter is to be discussed. Rooms should be dressed up; equipment, books, and bulletins ordered and arranged; illustrative materials gathered and stored; prospective students visited.

Much more—but space is limited—*so is your time.*—S. D.

Methods

Teaching Cooperative Marketing

C. C. TEAGUE, Former Vice-Chairman, Federal Farm Board

VOCATIONAL agriculture instructors, as well as other educators in the United States, are confronted with new and interesting work that is growing up with the farmers' co-operative marketing movement.

For many years high schools, colleges, universities, and extension forces have been teaching scientific principles of production. That will be continued, and in addition educators are finding it necessary to teach the principles of co-operative marketing.

I want to assure you that the Federal Farm Board deeply appreciates the work that teachers already have been doing in familiarizing students and farmers with basic facts about co-operative marketing.

In passing the Agricultural Marketing Act Congress authorized and directed the Farm Board to promote education in the principles and practices of co-operative marketing of agricultural commodities and food products thereof. "How are we to promote educational work?" was one of the first questions asked by Farm Board members. Would it be necessary to employ scores of teachers and place them in different parts of the United States to give instruction to farmers and school children in the principles and practices of co-operative marketing? Congress answered that question by instructing the Farm Board to avoid duplication of existing educational agencies. I will quote from the Agricultural Marketing Act a sentence that guides the Farm Board in this matter. You will find this sentence on page 8, Section 13 (a), of the Act. It reads, "The Board shall, in co-operation with any governmental establishment in the executive branch of the government, including any field service thereof at home or abroad, avail itself of the services and facilities thereof in order to avoid preventable expense or duplication of effort." Congress did not want us to duplicate the present education system, and, of course, the Board has no desire to do so.

The Farm Board naturally turned to the high schools where vocational agriculture is taught, to the agricultural colleges, to federal and state extension forces, to general farm organizations, and to the co-operatives themselves for help in educating this country in the new principles and practices of marketing farm products under a farmer-owned and controlled system.

Board Is Cooperative

From the beginning the Board has been co-operating with established agencies. A short time after the Board met, initial steps were taken to correlate its work with that of the various educational forces. We have been working in close harmony with Dr. C. H. Lane and his co-workers connected with the Federal Board for Vocational Education, a governmental agency, and also with officials of the Association of Land Grant Colleges and Universities.

So far, the public generally and opponents of the co-operative marketing movement particularly, have judged the activities of the Farm Board by what has been done to stabilize the price of wheat and cotton. Stabilization operations are considered by the Board to be purely of an emergency character. The stabilization element of the co-operative movement is of importance but by no means as important as the work being done on the long-time program.

It is quite natural for the Board's work to be judged primarily by its emergency activities. Sensational elements that make bold-faced headlines in the newspapers and magazines of this country have grown out of emergency measures. Information that makes good news usually does not grow out of such long-time projects as those being developed in connection with co-operative marketing.

I am inclined to believe that if the sound principles of co-operative marketing involved in the long-time projects are to be passed along to farmers and consumers effectively we will have to depend primarily upon our vocational teachers, agricultural college and university professors, county agents, field workers, general farm organization and co-operative associations.

Today I am glad to say that federal and state agricultural agencies are earnestly co-operating on a national educational program designed to acquaint farmers with the new developments in co-operative marketing. The agencies participating in this correlated educational movement include the United States Department of Agriculture Federal Board for Vocational Education, federal and state extension groups, land grant colleges and universities, state departments of agriculture, general farm organizations, and farmers' co-operatives. All of these agencies, along with the Federal Farm Board, are aiming at the same goal—that of developing a more efficient and profitable system of marketing products produced on the farm. The task is of such magnitude that there is plenty of work for all.

I want to point out why I think there is such a vast and challenging piece of work ahead of the educators of this country.

I do not think that teaching of co-operative marketing principles will be limited to rural schools or agricultural colleges. In the future I believe children in our city schools and students in our colleges and universities will need to learn the fundamentals underlying our improved system of selling farm products. Troubles in agriculture spread to the nation as a whole, affecting both the city and the country. This cannot be avoided because of our complex and interdependent system of marketing and distribution.

You do not need to have any doubt about the element of permanency in your work of teaching co-operative marketing. Opposition to the farmer's efforts to organize will not put an end to co-operative marketing. Members of the Farm Board have great confidence in the soundness of the movement and have little fear of the opposition that comes from selfish interests.

Upon resigning as chairman of the Federal Farm Board recently, Alexander Legge pointed out that those opposing the work of the Board are making a lot of noise but really represent a very small percentage of the American public. Their opposition is based, he says, on two statements that seem rather conflicting—first, that the co-operative principle is all wrong and must fail because it is fundamentally unsound and unworkable, and, second, that it is seriously interfering with their privileges as handlers of agricultural commodities. If the first condition were correct there should be no need of their being greatly concerned over their position, said Mr. Legge.

The day Mr. Legge left he made this important and encouraging statement: "Personally, I have a greater confidence in the ultimate success of the program laid down by Congress in the Agricultural Marketing Act than when I undertook the work some twenty months ago."

Long Time Program Important

I think you will be interested to know what Mr. James C. Stone, the new chairman of the Federal Farm Board, thinks about the importance of the long-time program of the farming industry. A few days ago he made a statement in which he said: "There are two phases to the work of the Farm Board which might be broadly described as first, the long-time program and second, the temporary measures to deal with emergencies. The former (the long-time program) is by far the more important since it seeks, thru organized effort on the part of the producers, to get agriculture on a permanently sound financial basis. In the latter class are the wheat and cotton stabilization operations growing out of the present business depression. Perhaps due to the fact that more publicity has been given to the stabilization activities than to the major efforts of the Board in helping to develop an organized agriculture, there has been a tendency on the part of the public, particularly business men, to judge our work on the temporary measures rather than the activities de-

(Continued on next page)

signed to correct the basic ills of the farming industry."

Chairman Stone further said that "The long-time program seeks, thru organized action of producers to bring about these two results: First, the development of a marketing system that will return to the farmer the full market value of his product, based on supply and demand conditions. Second, an adjustment of production, both quantity and quality, to the potential consumer demand."

Consumers, as well as producers, will benefit thru a better system of co-operative marketing which will bring about lower costs of distribution, better standards and grades, improved classes of products, and more stable prices.

An efficient system of marketing under the control of farmers will give the producers a living wage and should tend to minimize extreme swings in prices. There is a wide fluctuation in the prices of some of our agricultural products, particularly perishable crops such as fruits and vegetables. Even where prices go to an extremely low level, consumers do not always benefit in the long run, because extremely low prices usually discourage planting the next season, often resulting in a shortage of the commodity and higher prices to the consumer.

There is ahead of us a long-time educational job to insure that economic conditions are appreciated, that economic laws and forces are appraised and understood. The principles of co-operation must be disseminated and inculcated to offset the forces of a competitive disintegrating individualism.

How this may best be brought about may well deserve thoughtful consideration. Existing agencies, such as the extension service, the vocational educational forces, the state departments of agriculture, the Federal Farm Board, and other organizations will play their respective parts.

The program of co-ordination and co-operation among various educational agencies that are working with the Farm Board is doing much to promote a more receptive attitude among farmers toward the co-operative organization program. This work must progress among children as well as adults. The full scope of efficiency will not appear unless the boys and girls—the coming generation—receive the benefit and stimulus resulting from a soundly organized, well-balanced educational program, of which co-operative organization is a fundamental portion.

A fairly good start has been made in teaching co-operative marketing in our colleges and high schools but we must reach on down to the rural school which must become the key to unlock the door of economic and social security and stability in the agricultural industry. For some time I have been wondering if at present rural school programs are designed to cope with the situation. Too often such programs are lacking in definite relationship to rural life. Too frequently they are but cheap imitations of programs for city schools. Not infrequently the instruction leads definitely away from rural life instead of toward it. Wherever such conditions exist, agricultural problems grow progressively worse and not better. To the extent that they exist, they constitute a menace to some of the institutions on which the foundations of our greatness as a nation have been laid. They challenge the best thought of the nation for their elimination.

Perhaps a great part of the work of starting a more extensive system of teaching co-operative marketing in the rural schools rests with the teachers in our high schools and agricultural colleges. This deserves serious consideration by those who are training teachers, county agents, co-operative leaders, and farmers.

One of the most important tasks for the educator is the training of leaders to manage co-operative organization. There is today a great shortage of men trained to successfully manage co-operatives. The work of training leaders to handle co-operative organizations in the future rests upon the shoulders of our teachers in high schools, colleges, and universities. It is within the power of our educators to train men so that they will know how to avoid the disastrous mistakes that result where men do not understand the fundamentals of merchandising.

In future years there will be a great demand for men who are not only properly trained but whose sympathy is with the farmer in his effort to develop a system of marketing that will place agriculture on an equal basis with other industries. Our investigations and our intimate experiences reveal that one of the main difficulties with co-operatives is that they are too often managed by men who have not had sufficient training and experience in marketing. Such leadership has frequently led to unwarranted advances to farmers on commodities and the holding of products off the market when they should have been sold.

The 4,380 teachers of vocational agriculture in this country can have a tremendous influence in the shaping of an agricultural program. They are in daily intimate contact with thousands of farmers and many thousands of farm boys and girls. In addition to their day classes, I understand that last year they conducted 2,600 night classes for adult farmers which were attended by more than 60,000 farmers and farm boys out of school.

Agencies of every kind are vying with each other in participation in the co-operative program. There is plenty of room for all of them to work on this project. Is the time not ripe for enlisting the rural schools in the cause which means, in the long run, that co-operation, properly supported by those whom it is designed to benefit directly, will reduce economic depression, restore agriculture to a parity with other industries and eliminate some of the social evils now adversely affecting rural life?

If co-operation is to become the animating motive of the farm business, the rural schools, as well as the high schools and colleges, must teach the facts of co-operative marketing.

It was thru the teaching in the folk schools of Denmark that co-operation became the dominating feature of their agriculture. With the lever of co-operation, Danish agriculture was lifted from the depths of depression to the pathway to prosperity. Can America hope to develop a national system of co-operation in agriculture if the schools of this country are silent in its behalf or ignorant of its real value and intent?

I earnestly urge the educational leaders of this country to plan their courses of instruction to embody the principles of co-operative marketing. Let co-operation be humanized and made real in the consciousness of rural youths.

I realize that teachers are handicapped in their efforts to get facts concerning the co-operative marketing movement, particularly the new phases of the program. Our textbooks must be brought up to date. A few months ago the Farm Board's staff aided men of the Federal Board for Vocational Education in preparing co-operative marketing outlines for vocational teachers. We are told that these outlines on grain, livestock, wool and mohair, cotton and tobacco, are proving of value to high school teachers. As time goes on, the program of co-operative marketing, fostered by the government, will become more thoroly crystallized. Then the principles can be set forth in more exact language, and as a result teaching will be greatly simplified.

One handicap in the teaching of co-operative marketing has been eliminated to some extent thru the development of centralized co-operative marketing agencies. Before the Agricultural Marketing Act was passed, vocational teachers, county agents, and other leaders were often embarrassed when asked by a farmer which co-operative marketing association he should join where two or three commodity marketing associations were in the same district. In many cases this reason for embarrassment has been removed because central sales agencies have been established for a great many commodities. Competition has been eliminated and all of the farmer's product, marketed co-operatively, moves over the same route.

For example, co-operatively marketed grain is handled by the Farmers National Grain Corporation, cotton by the American Cotton Co-operative Association, livestock by the National Livestock Marketing Association, wool and mohair by the National Wool Marketing Corporation, and pecans by the National Pecan Marketing Association.

Farmers whose products are handled by these central agencies deliver to local co-operatives. The locals are affiliated with the centrals thru regional organizations.

The five central sales agencies have been established by co-operatives with the aid of the Farm Board. Regional marketing organizations also have been set up for other commodities, which greatly simplifies the question of deciding upon what association the farmer should join.

There are various activities now being carried on which should clarify some of the perplexing problems that confront farmers and co-operative leaders. For instance, a survey of co-operatives in the northeastern states has been conducted by the Board in co-operation with the state departments of agriculture. This survey has been in the nature of an inventory of co-operatives. It has been carried on to show exactly what we have in co-operation in this section of the country. The status of the association, the services they are rendering their members, and the possibility of

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Professional

H. A. Glenn, Master Teacher of the South

IT IS not possible in a few words to tell the entire story of Mr. Glenn's accomplishments. Only a few of the most notable accomplishments can be briefly pictured.

The boys who have studied agriculture under Mr. Glenn at Kenbridge, Virginia, have become interested in farming and their supervised practice program is evidence that they have profited materially from Mr. Glenn's instruction. As further evidence of Mr. Glenn's success in this respect 70 percent of all of the boys who have studied agriculture under Mr. Glenn for the past seven years are now farming in Lunenburg County.

It would only be an injustice to attempt to place a monetary value on Mr. Glenn's activities. The value of his work simply cannot be measured in this way.

The most satisfying feature of Mr. Glenn's program is that he has demonstrated that he can teach a large number of individuals and at the same time increase the efficiency of his methods. During the session of 1929–30 Mr. Glenn's enrollment was as follows:

Consisted of 58 farm boys enrolled in two high schools and 148 farmers enrolled in evening classes. This makes a total of 206 individuals enrolled as regular students not including the many others who have received valuable assistance. For the session 1930–31 he is continuing his splendid program and in addition is planning to organize a part-time class in a further attempt to aid in improving the agricultural conditions of Lunenburg County.

A Long-Time Program

A department of vocational agriculture was established at Kenbridge in 1923. Mr. Glenn was employed as instructor and has remained a fixture there ever since. His first task was to make a survey of 50 farms about Kenbridge and Victoria in historic old Lunenburg County. From these he determined the general agricultural conditions and the practices being followed by the farmers.

The information gathered from these surveys was used as a basis for establishing a long-time program of instruction arriving at improvements thru the supervised farm practice program of the high school boys and evening class members. He was not primarily concerned with revolutionizing the system of farming in a short time but set up objectives that would ultimately change the system of farming in the communities he served from a one-crop system to one providing cash crops, feed for livestock, and food for the family.

Mr. Glenn has been unusually successful in making his instruction fit the needs of his students whether farmer or farm boy. For the boy each program aims first at training the boy for a specific kind of farming and second to improving the home farm program to the extent that there would be room for the boy there when he graduated. Standards of efficiency in farming were set up by each boy for his farming. A scoring device is used so that each boy could compare his farming efficiency with that of his fellows. It is interesting to note the splendid progress Mr. Glenn has made in this respect. Thru his evening class instruction Mr. Glenn has attempted to aid the farmers in solving the problems that confront them on their individual farms. He has been most thoro in his supervision of improved practices.

Improvement of Farm Programs

In 1929 Mr. Glenn made surveys on the same 50 farms in the Kenbridge area where there has been practically no vocational instruction. It is most interesting to compare the progress made in the two areas. In the Victoria area conditions existing in 1923 have remained almost constant up to the present time. In the Kenbridge area the system has been almost revolutionized. A large part of the tobacco acreage has been replaced by legumes and other crops. The system of farming has become very much better balanced and indications are that the change in system has greatly improved the financial status of the farmers.

Mr. Glenn's ability to organize his efforts had made this extensive program possible. He has demonstrated in no uncertain terms his ability as an agricultural teacher. The fact that his services are appreciated is evidenced by the comments from the leading people in Lunenburg County. He is held in the highest esteem by every one and his friends have expressed a great satisfaction in having this honor conferred upon him.—D. J. H.

North Central Research Committee Meets

THE Committee on Research of the North Central Region held a two-day meeting at Iowa State College on May 25 and 26. Dr. F. W. Lathrop, research specialist of the Federal Board for Vocational Education, met with the committee.

Special attention was given to the outlining of a program of research for the region, securing better publicity for research, and to developing organizations and policies which will produce an adequate quantity of research of the right kind.

Bradford On Leave

Professor H. E. Bradford, head of the department of agricultural education of the University of Nebraska, has been granted a leave of absence for the coming year. Professor Bradford expects to spend this period at Cornell University where he will study for his Ph.D. degree.

Forum On Public Education

MEETING at Cornell University, Ithaca, New York, August 17–20, 1931, the American Country Life Conference will discuss the general topic, "Rural School Government."

Chairman, Francis B. Haas, president of the State Teachers College, Bloomsburg, Pennsylvania; secretary, Julian E. Butterworth, professor of rural education, Cornell University.

TUESDAY AFTERNOON

Topic: Some Types of Local School Units.

2:30—The California High School District, Dr. W. M. Proctor, Stanford University.

2:50—A Plan for Co-operative Re-organization in Vermont. Mr. A. J. Holden, Vermont Commission on Country Life, Burlington, Vermont.

3:10—The County School District. Dr. R. E. Jaggers, director of rural education, Kentucky State Department of Education.

3:30—The City-County School District. Mr. John M. Foote, director of research, Louisiana State Department of Education.

3:50—General discussion.

WEDNESDAY MORNING

Topic: Problems in the Development of the Central Rural School District in New York.

10:00—Criteria for laying out the central district. Mr. Ray P. Snyder, director of the bureau of rural education, New York State Department of Education.

10:20—Types of problems in providing educational facilities for those areas lying near cities. Dr. J. Cayce Morrison, assistant commissioner for elementary education, New York State Department of Education.

10:40—The function of an intermediate unit in making available more adequate educational facilities. Dr. Francis B. Haas, Bloomsburg, State Teachers College.

11:00—Guiding principles in dealing with the foregoing problems. Dr. Harlan Updegraff, educational adviser for Griffenhagen and Associates, Trenton, New Jersey.

11:20—General discussion.

WEDNESDAY AFTERNOON

Joint session with the Public Health and Welfare Forum.

THURSDAY MORNING

Topic: Criteria for the establishment of local units of school government.

10:00—As revealed thru a state survey of school districts in Ohio. Dr. C. C. McCracken, president of the Connecticut Agricultural College, Storrs, Connecticut.

10:40—Curricular demands on the high schools of the future affecting the size of the local school district. Dr. E. N. Ferriss, professor of rural education, Cornell University.

11:00—Educational and social factors. Dr. M. G. Nelson, New York State College for Teachers, Albany, New York.

Open Air Theater for Virginia High School

EDM. C. MAGILL,
Professor, Agricultural Education,
Blacksburg, Virginia

SEVERAL high schools in Virginia have plans for open-air theaters but the first one to be completed by a rural high school is in Pittsylvania County. The Dan River High School held its commencement exercises this May with a rural family of 1,200 people easily accommodated. There in that amphitheater, with a mass of natural green woods for the stage setting, this open rural community gathered to honor its 28 sons and daughters, the product of their own rural school system.

It seems still more striking when one considers that here is a tobacco community facing the same financial plight of all other tobacco communities. Yet they have an open-air theater that many a city would be proud to possess. A teacher of agriculture, Harry M. Love, had dreamed of such an undertaking as thru several years he and his patrons had transformed an ugly school ground into a thing of beauty. At one side was a gently sloping ravine somewhat washed and unsightly. Limited classroom facilities made it necessary to change the school auditorium into rooms. The community no longer had any place for public gatherings. Mr. Love's dream for an out-of-doors theater became a definite plan to meet the emergency this year.

The local chapter of the Future Farmers of America under the advisership of Mr. Love, adopted the undertaking as a project. They interested the rest of the school and the community. The senior class and the 4-H Club contributed the lights and the facilities for irrigation necessary for maintaining a good grass turf. The home economics group and the F. F. A. contributed funds for forms and dynamite. The F. F. A.'s and patrons in response to the enthusiasm of the teacher of agriculture, scraped, graded, terraced, hauled sod, and the like until the amphitheater became a reality in time for the commencement exercises. The labor donated would have made a sum of over $1,500 but the total actual cash expenditure was but $62.

The ravine was first transformed into a bowl facing the woods at the edge of the property. With this screen of woods as background supplemented further by a thickly planted mat of young pines, a semi-circular stage was built at the bottom of the bowl, 20 feet from center to circumference. Extending back on the slopes in a full half circle are tier after tier of terraces. Each terrace rises one foot and is five feet broad. Wooden forms have been used for the present but all these are eventually to be replaced by facings of local white flint rock neatly laid in cement. A constant grade has been maintained and carried back to 80 feet providing a seating capacity for 1,500 people. In time the size will be increased and can be extended back 150 feet to accommodate a tremendous throng. Three broad aisles approach the stage, one by way of the center and one on each side. High poles are located around the border of the amphitheater and electric lights are strung between them giving ample light. The water system has been extended from the school water plant and connections provided over the area to make irrigation possible for the entire theater. Blue grass sod had to be hauled three miles but enough was hauled to lay the entire theater. The acoustics are remarkably good being far superior to many school assembly halls. Some visiting engineers were very much interested in the excellent acoustical facilities.

Here is an accomplishment to which many rural high schools and their communities might well aspire wherever there is some ravine or slope on the school grounds or in the community that would permit. It has taken vision on the part of Mr. Love, much careful planning and enthusiasm and patient persistence. He, his fellow Future Farmers, the school and the community are to be congratulated first on their achievement and second on a concrete demonstration of something practical and yet very much needed in every rural community. The product is a thing of beauty which if housed under roof and brick would have cost thousands, yet all was done at a moderate cost. An excellent example of co-operation is evidenced when 17 teams can be gathered together with many workers in a single day. The entire community is to meet shortly in dedicating this transformation of an ugly ravine to the future of the Dan River Community. It should go far in encouraging local pride and serve as a realistic monument to the co-operation of the community.

Open Air Theatre Built at Dan River High School, Virginia

Equipping a New Agriculture Department

J. F. LANGENDORF,
Instructor, Vocational Agriculture,
Casper, Wyoming

IN EQUIPPING a new vocational agriculture department, the following facts should be in the mind of the man who is responsible.

First, he should be thoroly acquainted with the general type or types of agriculture carried on in his community. Second, he should know what jobs are usually done on the farm or ranch by successful operators. Third, he should understand the learner. Fourth, he must know how much money is available for equipment.

The first point, namely, the acquaintance with the general type of agriculture carried on in his community, will bring out the interests of the boys and of the community. The projects undertaken in the shop and classroom will be correlated directly with the boy's home interests. He will construct and learn about the things with which he comes in direct contact in his home surroundings.

The second point deals with practicability. In almost every farm show we find articles made by the learner that could be purchased at a smaller cost. The successful farmer would never make articles that could be purchased with a small outlay of money, provided of course that the articles are of similar value. The construction of such articles should not be undertaken by agricultural students unless they are made to teach certain necessary manipulative skills.

Referring to the third point, above, the learner must be understood in order for the instructor to do a good job of teaching and also when selecting new equipment. Many school authorities think that cheap tools and equipment will suffice in an agricultural department because of the hard usage they receive at the hands of the learner. They forget the fact that only the best of tools and equipment will withstand this use.

The instructor must know how much money is available in order to work intelligently in selecting the equipment. School authorities should always be willing to furnish this information to the man they have selected to set up their department. Without this information it would be next to impossible to make out the best list of necessary equipment for his specific community.

With the above points well in the mind the instructor is now ready to prepare his list of equipment and tools, the preparation of which is by no means a small job.

The agriculture teacher should be on the job several months before the opening date of school so that he may have sufficient time to become acquainted with his community and the situation at hand. Much of the necessary equipment such as tables, book and bulletin cabinets, magazine racks, shop benches, and so forth, can be constructed by him prior to the opening date of school. In the construction of these articles, the instructor should give some consideration to strength and appearance. Too often equipment is constructed that is an "eye sore" to the educational plant. The students as well as the school patrons and school authorities will be en-

thused by well constructed attractive equipment.

The tools and equipment in the shop should be similar to those we would expect to find on a modern successful ranch or farm. If power saws, electric forges, and so forth, are not found on the adjacent farms, they have no place in the agriculture shop, because after all we are training the learner to successfully use the type of equipment found on nearby farms and ranches as those are the tools we will have to use out in the field.

In Wyoming, our farm shop instruction usually consists of five branches of work, namely, woodwork, leather work, rope work, soldering, and blacksmithing. In making out the lists of shop tools and equipment, the instructor should list all the tools and equipment and supplies necessary in each of the five divisions. If this method is used, the chances of forgetting certain articles will be less; or better still, he may use the lists prepared by the state supervisor. Only standard high-grade equipment should be purchased as "cheap" tools are often responsible for poor work and high replacement cost.

The cost of the necessary equipment in the vocational agriculture department varies with the size of the plant. However, with the Wyoming departments in mind, I should say that this cost would range between $700 and $2,000. This of course depends entirely on the prospective enrollment. It would be impossible to set up a high-class department with a smaller outlay than $700 for the equipment regardless of the size of the plant. This is true because the kind and quality of the equipment would be the same; only the quantity would vary. This cost can be spread easily over a period of years. For example, the department at Casper purchased enough equipment to conduct a course in animal husbandry for two classes of 20 students each. The next year, equipment for a course in crops will be purchased. In this way a larger number of students can be accommodated without excessive strain on the finances, and in a period of years all the necessary equipment for the various courses will be on hand. The cost of equipment in the instance cited amounted to approximately $750. The second year the cost of the necessary equipment will come close to $700 while the equipment cost the ensuing years will probably be less, provided however, that high quality equipment is added each year which should bring replacement costs to a minimum.

When the instructor has prepared a list of equipment it might be wise to present copies of this list to local dealers for bids. A substantial sum of money can often be saved by this method of procedure and should not cause any hard feelings toward the agriculture teacher.

In our department here in Casper the classroom was made ready to receive the students on the opening day of school while the entire workshop and toolroom was equipped after school had started. The boys under the supervision of the instructor, set up the forges, constructed the tool boards and work benches. This furnished splendid experience for the learner because he will profit by it when he sets up his own farm repair shop.

Conference Called On Rural Education

THE United States Office of Education joined with the National Education Association and the National Congress of Parents and Teachers in calling a national conference on rural education Thursday, July 2, at the Bovard Auditorium of the Administration Building at the University of Southern California, Los Angeles. Three programs were provided for this conference.

First Program, Thursday, 9 A. M.

The Next Ten Years in Rural Schools—What state departments of education, colleges for teachers, and colleges of agriculture should accomplish in the improvement of rural education in the next ten years.

Second Program, Thursday, 1:45 P. M.

The Next Ten Years in Rural Life—How the rural home, the rural church, the rural press, and the development of farming as a successful business enterprise can co-operate to effect a satisfactory standard of rural life in the next ten years.

Third Program, Thursday, 8 P. M.

The Next Ten Years in Rural Child Welfare—How such national agencies as the White House Conference, The Federal Farm Board, the United States Office of Education, and the organized teaching profession can contribute to the welfare of rural children in the next 10 years.

Agricultural Education had a special representative at this conference and will print a report in a forthcoming issue.

Teaching Cooperative Marketing

(Continued from page 20)

grouping these associations into regional organizations and developing sound locals are the things that are being studied in connection with this survey. On the basis of this study, intelligent plans can be made for the development of co-operative marketing in the Northeast. The Farm Board will assist in carrying out any sound forward-looking program developed for this section. It would be desirable for the initiative in developing plans of this kind to come from local agencies which are more familiar with conditions in this area. The extension agents, the vocational agriculture teachers, the farmers and their co-operatives should all take part in this work.

As handicaps are gradually removed the future becomes more encouraging. Farmers are learning fundamentals of co-operative marketing and management is becoming more experienced.

It has become a policy of the United States government to support the farmers' co-operative marketing program. I want to emphasize the importance of this governmental policy because it has a direct bearing on your work. It should remove all doubt from the minds of agriculture teachers and extension agents as to the justification for their supporting the co-operative marketing movement.

[The above paper was delivered at the North Atlantic Regional Conference of 1931.]

Agricultural Education in the Philippines

M. A. FOSTER,
University of the Philippines

THE Philippine public schools came under the American administration in 1898 and within a year more than 100,000 children were receiving instruction. Industrial instruction in the grades was fairly well organized by 1904 and in the secondary schools before 1910. Gardening and farming courses were offered almost from the beginning.

The University of the Philippines was founded in 1908 and the College of Agriculture opened a year later. Establishment of a department of agricultural education was authorized by the Philippine legislature in 1927; Professor Merle A. Foster was placed in charge of the department in August, 1928, and classes were opened in October.

The purpose of the department is to train teachers in agriculture for the secondary agricultural schools of the Philippines. A rural high school has been established as a training school with an enrollment of more than 200 pupils. The college preparatory work has been transferred to the rural high school, which also provides for those students who are deficient in entrance credits; the old six-year (above intermediate) B. Agr. course has been discontinued and the College of Agriculture now admits only graduates of four-year high schools.

In the two years since organization the department has given instruction to 139 different individuals in one or more courses each. The credit earned by these students totals 1,100 hours. Twenty-six semester hours are required by the revised course for the special Certificate in Agricultural Education.

The courses of the department are open only to juniors, seniors, and graduates of the B. S. A. course, in which most of the work is credited. The certificate is granted on completion of the B. S. A. degree and the required work of the department, provided the major work has been taken in horticulture, farm crops, animal husbandry, or agricultural engineering. Each candidate must be approved by a committee consisting of the heads of the departments in which students are permitted to major, and the heads of the departments of English and agricultural education.

The faculty of the department of agricultural education consists of one professor, one associate professor, two assistant professors, four instructors, and five teachers.

Where Graduates Go

A SURVEY of 19 leading agricultural colleges shows that the agricultural graduates may be found in the following lines of activity:

Five and eight-tenths percent do research work.

Twenty-four percent become teachers.

Eight and four-tenths percent do extension work.

Ten and four-tenths percent affiliate with businesses related to agriculture.

Twenty-three and six-tenths percent go into miscellaneous activities.

Twenty-seven and eight-tenths percent go back to the farm.

Evening Schools

Study Broad Leaf Tobacco Production

J. C. DUFFORD, Teacher of Agriculture, Glastonbury, Connecticut

DURING the winter of 1930–1931, we conducted in the village of Addison, Connecticut, an evening group that considered a few of the problems of interest to broad leaf tobacco farmers. The first meeting was held November 19, 1930, with an attendance of 20. Altogether there were 14 meetings. The last one came on March 4, 1931. The attendance varied from nine to twenty and averaged thirteen.

Getting the Class. For the benefit of those who may wish to know how this group was assembled, a brief explanation follows: The writer has lived in this community for almost eight years, and has become fairly well acquainted with most of the people who live here. During his period of service he has visited most of these tobacco growers on their home farms, and at various times has inquired whether they would be interested in starting a group for the discussion of their problems. During the summer of 1930 a few men expressed a desire for definite work in certain phases of broad leaf tobacco production. These men suggested the names of others who very probably would be interested. Most of them were visited prior to the opening of the meetings. About ten days before the time scheduled for the start, a circular letter was sent to each of some thirty tobacco men in the community. From this group we managed to average 13 farmers per meeting.

While the attendance was not very large, the interest and discussion from the men themselves more than made up for the lack of numbers. Of the entire number of men who attended the meetings, only two or three were of the native Yankee stock. The others are emigrants from Austria, Poland, and Germany. Four or five still have difficulty understanding English and in speaking the language.

Our attention centered largely about three topics of discussion. Because of the rather trying conditions under which farming has been struggling for the past few years, we started with the economics of broad leaf tobacco production, and had more or less discussion of that subject scattered thruout the winter. Fertilizing the crop also received much attention. This topic is of particular importance because of the large amount of money usually spent per acre for fertilizers. Control of diseases and pests was the third topic to be emphasized. At the present time follow-up work is being done. Each of these topics will be presented in order.

Economics of Broad Leaf Tobacco Production. By means of price level curves, statistical graphs and tables, an attempt was made to show price trends, probable acreage of the crop for the next year or so, the stocks of tobacco on hand, and the rate at which broad leaf tobacco is being withdrawn for manufacture. The local instructor in agriculture covered this field so far as Glastonbury conditions are concerned, and then had one of the professors of agricultural economics from the Connecticut Agricultural College spend one evening discussing the outlook. The prospects seem to be rather discouraging so far as increased prices are concerned, but there seemed to be some possibilities for reducing cost of production. Some attention was also given to the re-organization of tobacco farms for the purpose of reducing cost of production. Plenty of evidence was presented to show that men who are growing less than ten acres of broad leaf tobacco will have difficulty making a living at that work alone, and that producers of more than ten acres probably could increase their net incomes by diversifying their business to some extent. Dairying seems to be a very satisfactory enterprise to conduct with tobacco production. Most tobacco men, however, seem to dislike the idea of handling cows.

The first meeting was given entirely to a discussion of price levels and trends with emphasis placed upon the influence of war and war-time inflation upon prices. That meeting brought us the largest attendance of the year, and that discussion probably tended to eliminate those who were looking for the spectacular.

Fertilizing the Crop. Since the war most broad leaf tobacco growers have been paying from $75 to $140 per acre to purchase plant food for their crop. This large expenditure has been practiced for so long that growers hardly expect anything better. Experimental tests of the experiment station at Windsor, Connecticut, have shown, however, that good crops of broad leaf tobacco may be grown with the purchase of much lower priced fertilizer mixtures. One company had been offering the fertilizer at $77 per ton delivered to the farm of the grower. Thru the evening class we discovered that the same mixture could be purchased at $57 per ton. The farmers greatly appreciated this material saving in their fertilizer purchases.

Control of Diseases and Pests. Two very serious diseases were rather carefully discussed by the group. Many growers have had the conception that wildfire, a bacterial disease, is caused by rain. By using a compound microscope and preparing a slide or two to show leaf structure and then using a laboratory-prepared slide of wildfire bacteria, we managed to clear up some of the ideas concerning this disease.

Follow-up Work. Since the close of the meetings, we have definitely attempted to visit each of the farmers at his home to test for acidity any soils about which he was doubtful, to assist in the selection of fertilizers and other problems concerned with the development of young plants.

What the future holds is more or less problematical, but the writer believes a definite start has been made in the development of good will and co-operative thinking among this particular group of tobacco growers. And the opportunity to work with the adults of the community thru evening class work has been the biggest factor in putting across an effective program in vocational agriculture.

Results From Evening School Instruction

L. E. PETTYJOHN,
Whaleyville, Virginia

[Editor's Note: Since 1927 Mr. Pettyjohn has been teaching evening schools in this community, and each year the attendance has increased. This year the average attendance was 45 for 13 meetings.]

SOME improved practices resulting from evening schools as listed by Mr. Pettyjohn are:

Eighty-seven farmers now growing cover crops who did not in 1926.

Eight carloads of rocklime purchased this year at a saving of nearly $3 per ton. None used formerly.

Forty-four farmers using all or part of hog pasture rotations, none before.

Eighty farmers using soybeans for hay that were not doing so previously.

Practically no farmers now pulling fodder and topping corn; previously all did so.

Forty-two farmers have purebred hogs of one breed. Previously very few purchased hogs and all breeds more or less represented.

Twelve farmers keeping the home flock of poultry in modern way with profitable results.

Twenty-four-farmers treating sweet potatoes for black rot; none previously.

Practically all brood sows are kept double treated against cholera and all fattening shoats given treatment. None previously. Practically all farmers now using fertilizer under peanuts as recommended by the department. Previously none were used. The factory is now putting the mixture recommended on the market.

Four carloads of drain tile have been installed. None previously.

Two septic tanks have been installed, two more ordered for this summer. None previously.

Seventy-eight farmers have permanent pastures. None previously.

Practically every member has built modern type farrowing houses and no sows are permitted to farrow in woods. Previously unheard of.

Agricultural Evening Schools in Arkansas

RALPH B. SMITH, State Supervisor of Vocational Agriculture, Little Rock, Arkansas

R. B. Smith

DURING the first few years of secondary vocational agricultural education in Arkansas little attention was given by any one to the promotion of agricultural evening school classes for adult farmers. What few classes were taught prior to 1925 came as a local demand upon capable Smith-Hughes teachers in progressive farming communities where the all-day program had demonstrated its power to increase the earnings of young farmers.

During the school year of 1924–25, 284 adult farmers enrolled in evening school classes and carried out new or improved farm practices that earned them $48,820.93. The effectiveness of this work gave rise to more interest on the part of teacher-trainers, supervisors, and wide-awake instructors. While no campaigns or promotional drives have been conducted the growth of the work has been very satisfactory as is shown by the following figures:

1924–25....	284	farmers enrolled
1925–26....	399	" "
1926–27....	592	" "
1927–28....	680	" "
1928–29....	1,203	" "
1929–30....	2,424	" "
1930–31....	4,000	" "

For the past three years the value of new and improved practices of the adult evening school students has averaged well over four times the cost of the entire vocational agricultural program to the state. For the past two years many of these evening schools have been taught with a rather long-time view of the farm re-organization problem. In some communities this has been going on for a longer time. Two large evening school groups which the writer visited last winter were running for their fourth year under the same supervisor. Altho they were in the very center of the parched drought area their secretaries boasted that not a man in either group had to have help from the Red Cross. A wide variety of early and late crops together with much more livestock than is usually found was the secret of their achievement. While not having the most fertile soil these men had settled down to make a real living by a farm management program consisting of ample feed and food crops supplemented by several kinds of cash enterprises.

On account of the most unusual drought and financial situation existing thruout most of the state nearly all of the evening school work of the present year has been built around a course in farm re-organization. The teacher training department of our state university published a monograph for the assistance of evening school teachers. This splendid service gave the teachers essential data needed in the class procedure together with sample forms to be used in making a sound re-organization plan for the farm of each evening school student. After the plans were completed arrangements were often made for financing the plan and in many instances co-operative group orders were placed for seed and fertilizer.

Judging by the number of reports that are now in the state office it is estimated that 4,000 farmers were regularly enrolled in evening school classes, while half that many more were assisted in a less organized way. The conference method of procedure was used almost exclusively. The fact that the farmers could discuss their own problems and have a part in arriving at their decisions not only maintained a growing interest but seemed to give greater satisfaction. As Helen Keller says, "It is not knowledge but the use of knowledge that is important." The old lecture method of teaching the traditional institute type of evening school failed to secure enough practical application. The conference procedure followed by sympathetic supervised practice is bringing better farm earning and better farm living. The financial value of these new and improved farm practices is at least a fair measure of the value of vocational agricultural education.

A study made by the writer covering 96 Smith-Hughes schools shows that teachers who taught one or more adult evening schools are worth on an average five times as much to their communities on the basis of value of supervised farm practice as teachers who do not teach evening school classes. On an average teachers who taught two or more evening school classes are worth five times as much to their community as those who teach one evening school class. Teachers who taught two or more evening school classes are worth on an average ten times as much to their communities as those without evening schools.

Teachers of vocational agriculture who have developed a community program to such an extent that they are handling two or more all-day classes in the local high school and are teaching two or more evening school classes on an average are rendering a practice program alone worth 24 times the cost of the program to the local community. We are therefore justified in paying good salaries to vocational agricultural instructors who prove their ability to handle large programs which really correspond to a managerial investment. Without close supervision an incompetent teacher can hide himself in his classroom a long time. A good way to discover such teachers and to get the most from all types of vocational agricultural education is to allow the instructor enough time to develop at least two adult evening schools. If he is a real practical teacher the response to his efforts will demonstrate his true worth in something other than deferred values.

We shall be glad to receive good stories on evening school work. Send your contributions to C. L. Davis, State Board of Education, Austin, Texas.

Poultry Course Effective at Bremen, Ohio

R. J. THAYER,
Bremen, Ohio

A MIXED GROUP of adult farmers and farm women met each consecutive Monday evening during last winter at the Rushcreek Memorial High School at Bremen, Ohio. This course started the first of December and ended about the first of March. Discussions were for the purpose of acquainting local poultry raisers with new and up-to-date methods of management for poultry.

The subjects taken up in the meetings were as follows: breeds of poultry and their relation to marketing and egg production; construction and remodeling of poultry houses; care in feeding, brooding, and management of baby chicks; management of young pullets and marketing of broilers; care, feeding, and management of the laying flock; selection and management of breeding stock; incubation; keeping of poultry records; culling; and poultry diseases.

The discussions were carried on in a more or less informal manner, taking up such situations as the average poultry raisers found themselves facing. Using these items they were discussed and analyzed, bringing out the points of weakness and showing wherein better methods would lead to better and more economic production of poultry and eggs. Up-to-date findings of experiment station bulletins covering the points under discussion were used. These were ordered in sufficient numbers to give each person a copy.

Two outside men also were present at two meetings to aid and advise us in our discussions; these men were Mr. Fergason of the Ohio Experiment Station, and Mr. Valentine, a nearby hatchery man. These open discussions led to situations where the local Smith-Hughes instructor could see possibilities of follow-up supervision. The meetings were succeeded by private interviews with individual students in regard to the possibility of changing and organizing the student's program. From this point visits were made and programs figured out.

The local high school was selected as a meeting place as it was centrally located and afforded us the privilege of using the auditorium and the moving picture facilities. At three meetings reels were shown giving knowledge on culling, brooding, and diseases.

The average attendance for the ten sessions was 43. At two or three meetings the attendance dropped to approximately 25 due to bad weather and road conditions. In a few cases sons came with their fathers if the son was carrying a high school project for Smith-Hughes agriculture.

Class meetings were held from 7:30 to 9:15 p. m. each Monday evening, starting somewhere near the first of December, omitting two Monday nights during the holiday season. These meetings ran well into March. Monday was chosen as the meeting time because it least conflicted with the other activities held in the Grange, lodge, and school.

Supervised Practice

Score Cards for Measuring Supervised Practice

MEASUREMENT is fundamental if progress is to be achieved. An effort is being made in many states to formulate a semi-objective means for measurement. The two score cards printed herewith are offered as suggestive. The Kansas card is on the basis of the single project; the Missouri card is for the student's annual program of supervised practice.

KANSAS PROJECT SCORE CARD

	Points	Possible Score	Student's Score
1. For each month the project is carried	5	60	
2. For each monthly summary, complete	10	120	
3. For each instructor's visit, with comments	5	50	
4. For each hour of self labor on project	1	250	
5. For each project job planned	5	100	
6. For each project plan executed	10	200	
7. For each 1 percent net profit	1	50	
8. For each exhibition of project products, local fair (Seaman, Auburn, and so forth)	10	10	
State fair (Topeka or Hutchinson)	40	40	
9. For project ownership—			
Full ownership	100	100	
Half ownership	50	50	
Wages paid (no ownership)	20	20	
10. For each 2 percent increase in production over set standard	2	100	
11. Project publicity—			
Each newspaper clipping of project	10	30	
Each photo of project at different stages of development	5	10	
12. Plans for continuation of project	25	25	
TOTAL SCORE			
DEMERITS:			
1. For each day's delay in monthly summary	2	10	
2. For each week's delay in final summary	5		
TOTAL DEMERITS			
FINAL SCORE			

MISSOURI SUPERVISED PRACTICE SCORE CARD

Student..... School..... Date.....

Supervised Practice Program

Majors..... Minors.....

Items	Perfect Score	Student's Score
1. Project Study Outline—Working Plan	20	
Desirable objectives or aims. Detailed study of problems with acceptable decisions. Neat and systematic organization.		
2. Character of Practice Program	20	
Size and scope satisfactory. Continuation, major and minor projects included. Based upon the true needs, interests, and capacities of the student. Complete ownership by the student.		
3. Approved Practices Followed	25	
Use of maximum number of approved practices. Timeliness in use.		
4. Records and Accounts	10	
Complete, accurate, and neat. Satisfactory analysis and financial summary.		
5. Educational Outcomes	15	
Initiative shown. Skills and information acquired. Judgment developed. Attitude shown.		
6. Financial Outcomes	10	
Total net income. Percent return on investment.		
	100	

No teacher can get on satisfactorily if his knowledge does not extend outside of the immediate field in which his teaching labors lie; the student is entitled to all the sidelights which the teacher can throw on the subject under discussion.—*President George W. Rightmire, Ohio State.*

Labor is man's greatest function. He is nothing, he can do nothing, he can achieve nothing, fulfill nothing without working.—*John Dewey.*

Efficient farming and farm thinking that recognizes the distinction between price and profit, are as essential to agricultural success as two legs to a biped. —*McMillen.*

SEND FOR THIS

Vocational Education in the United States, Senate Document No. 309 of the Third Session of the 71st Congress presents the program of co-operation of the Federal government with the states in vocational education.

It may be secured from your senator.

A word of encouragement is worth more than a long fault-finding harangue. A sign of appreciation will stimulate better and more successful effort. A warm handclasp will evoke the spirit of co-operation, while a frown or a sneer will freeze the heart and make it bitter and resentful. Let your countenance radiate cheer, good will, and faith and your world will resound with joy and service.—*The School News of New Jersey.*

Co-operation Paid

D. L. WILLIAMS,
State Supervisor, Jackson, Mississippi

TWENTY-NINE boys, all-day students of vocational agriculture, at the New Hebron Consolidated Smith-Hughes School of Lawrence County, Mississippi, have been taught co-operation by participation in growing cotton during the past year according to A. J. Franklin, teacher of agriculture.

Mr. Franklin reports 100 percent of all-day students completing their projects. These 29 boys grew 117¼ acres of cotton, making 102 bales, the total profits being $7,523.43, or an average of $259.42 per boy.

The following steps in co-operation were practiced:

First, we began our project program by buying a co-operative order of cotton seed, all boys using pure Delfos 911 cotton.

Second, we bought most of our fertilizer in a co-operative order.

Third, we had regular gin days, both of the local gins co-operating in helping us keep our seed pure.

Fourth, we sold the cotton in this manner: The cotton was sampled, I took charge of the samples and the receipts. The samples were carried around to the ones who desired to bid on the cotton and on this trip around I told each cotton buyer that the cotton would be sold on a certain date, usually about two days later. This enabled the local buyers to get a representative from the men to whom they sold their cotton to come and look at the samples and get lined up. On the date the cotton was to be sold I called for sealed bids, say at 2 o'clock and they were immediately opened at a certain place in town, the bids read out and the cotton going to the one turning in the highest bid. It was sold in three sales, the first bringing 20.30 cents per pound, 26 bales; the next 20.16 cents per pound, 36 bales; the third lot, 19.525 cents per pound, 40 bales. This made a total of 102 bales, which brought $9,285.08, all of one variety.

Fifth, the boys co-operated in placing their pure seed on the market.

Mr. Franklin also had 22 day-unit students growing 58½ acres of cotton making a total profit of $3,374.64. Twelve evening class students carried 106½ acres of cotton under Mr. Franklin's supervision and increased their yields to the amount of $1,984.24 more than the average of the community.

The total returns of practice work in the New Hebron community totaled $12,882.31.

Colebrook Boys Grow 4500 Bushels of Potatoes

EARL H. LITTLE,
State Supervisor of Vocational Agriculture, New Hampshire

TWELVE Colebrook Academy students, enrolled in Smith-Hughes agriculture, raised 4,500 bushels of certified seed potatoes last year. This co-operative project of 14 acres was sponsored thru the local chapter of Future Farmers of America.

Last spring, thru the efforts of this local chapter, the boys purchased 283 bushels of carefully selected seed. These were purchased from one of the best known potato seed growers in the north country. Each boy planted on his farm one or more acres. This was as large an acreage as he could conveniently care for under his present farm conditions.

The fertilizer was bought co-operatively thru a farmers' exchange doing business in that section of the state. This was purchased in carload lots making possible for each boy to receive the benefit of large lot prices. The total investment for seed and fertilizer amounted to $1,595. Money was borrowed in the form of individual loans either from one of the local banks, interested business men, or parents of the boys. Approximately $110 was borrowed for each acre of potatoes planted.

Philip Barton, teacher of agriculture, carefully supervised the planting, cultivation, spraying and rogueing, thruout the growing season. In order to be certified, each field had to pass a rigid state inspection by the field inspector from the New Hampshire Agricultural Experiment Station. All the plots passed the examinations with a much lower disease count than the state requirements.

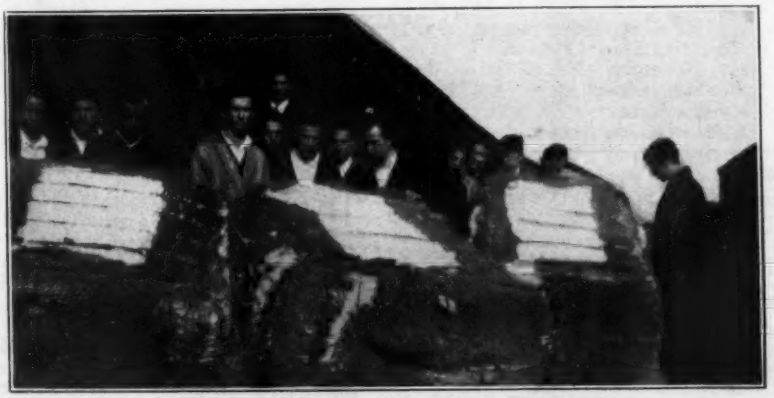
These one- and two-acre fields were carefully selected, fall plowed, and a rigid program of cultivation was followed during the early growing season. Dusting was followed by most of the boys due to its convenience and to lack of adequate spray equipment.

Digging time was a busy season for these high school boys. Each field was harvested and the potatoes stored either in the farm cellar or in a storehouse in the village. This seed has been graded according to U. S. Standard grades. The boys plan to sell to growers in the state. Already one of the largest potato growers has ordered 1,000 bushels.

A summary of the boys' accounts shows them to be efficient potato growers. The average yield per acre was 323 bushels. These were raised at a cost of 52 cents per bushel. The total cost per acre ranged from $165.96 to $259.12. This included labor, interest charges, and cost of all materials.

The boys who sponsored this project are: Frederick Stoddard, Shumway Marshall, Richard Hughes, Gerald Hurlbert, Stephen Cross, Stuart Covell, Roy Tibbetts, William Gray, Ralph Forbes, Clarence Banfill, Nelson Owen, and Percy Clarke.

Teacher inspecting potatoes grown by Martin Frizzell



Cooperative Selling Day at New Hebron, Mississippi

"Encouragement Should Be Given"

AMPLE facilities are provided for those of our people who can afford to take advantage of higher educational privileges. It is equally important that full opportunity be provided for the efficient training of those who are to perform the manual tasks of the world. The problems of the farm are daily becoming more intensive, and more adequate training in all the elements for successful farming should be encouraged. The experiments, investigations, farm economies, and sciences must, of necessity, be the task of the higher institutions, but the results thus obtained must be brought thru vocational instruction to the boys and girls who do the active farm work.

"The rapid changes in industry have displaced hundreds of workers who must be given an opportunity to earn a livelihood in new lines of work in which they have no experience or training. For these there must come a fundamental training along general industrial lines that will make possible a readier adaptation to other lines of work, and for the person who expects to follow more highly skilled vocations, there should be given an opportunity of training for fitness in his chosen field.

"There is also the adult who had no opportunity of definite education, or who perhaps now realizes neglected opportunities, and who has sufficient energy and ambition to become a more valuable person to society. He should have his chance.

"Vocational education aims to cover these fields and has made good progress during the decade of its existence. Encouragement should be given so that its program can spread to every locality and to each person seeking its advantages."—Dan Turner, Governor of Iowa.

Building a Long-Time Farm Practice Program

J. W. HULSEY, Instructor of Vocational Agriculture, Abernathy, Texas

THE boy whose supervised practice program is outlined below was a member of the vocational class of the Abernathy High School from 1927–1930. The boy's name is Billie Rankin. In 1927, he purchased a purebred cow from his father. This cow became his major project and her calf a contributory project. In 1929, Billie increased his major project to two registered cows and three registered calves. One of these calves, he bought from the famous herd of George W. Sisson, Jr., Potsdam, New York. The sudan acreage was increased during the third year and a sorghum project was begun. Thus the feed cost for the major project was very much decreased.

In 1931 he went in partnership with his father, and they won $35 in prizes at the Abernathy Dairy Show and about $50 at the Plainview Dairy Show.

During his third year in agriculture, Billie has made an intensive study of his supplementary farm practice in means and methods of marketing his milk products. He has started a small milk route which takes from 50 to 75 percent of his milk. The rest of the milk is sold to the local cheese factory in the form of sweet cream.

Supplementary Farm Practices

FIRST YEAR

Poultry Production—
1. Culling.
2. Grading eggs.
3. Caponizing.
4. Cleaning of yard and houses.
5. Preparation of show birds.
6. Selection of cockerels.
7. Selection of hens.
8. Marketing culls.

Beef Production—
1. Selection of breed.
2. Determine when to buy.
3. Care of cattle.
4. Judging the breeds.

Hog Production—
1. Selection of breed.
2. Determine when to buy.
3. Care of animals.
4. Building pens.
5. Judging the breeds.

Sheep Production—
1. Selection of breed.
2. Judging breeds.
3. Determine when to sell.

Wheat Production—
1. Selection of seed.
2. Selection of ground.

Cotton Production—
1. Selection of seed.
2. Judging seed.
3. Selection of variety.
4. Selection of ground.
5. Determine when to plant.

Supplementary Farm Practices

SECOND YEAR

Poultry Production—
1. Feeding laying hens.
2. Mixing scratch.
3. Feeding baby chickens.
4. Fattening ration.

Dairy Cattle Production—
1. Mixing ration.
2. Determine standards to feed.
3. Feeding before parturition.
4. Feeding young calves.
5. Feeding winter ration.
6. Feeding summer ration.

Beef Cattle Production—
1. Feeding fattening rations.
2. Feeding carry-over rations.

Hog Production—
1. Feeding before parturition.
2. Feeding young pigs.
3. Feeding fattening ration.

Cotton Production—
1. Controlling wilt.
2. Controlling cotton aphids.

Wheat Production—
1. Prevention of smut.
2. Wheat joint worm prevention.

Grain Sorghum Production—
1. Prevention of smut.

Sheep Production—
1. Prevention of stomach worms.
2. Prevention of sheep scab.
3. Prevention of grubs.

Supplementary Farm Practices

THIRD YEAR

Dairy Production—
1. Management of dairy cows.

Beef Production—
1. Management of beef cattle.

Wheat Production—
1. Marketing of wheat.

Farm Management—
1. Selection of farms.
2. Farm labor.
3. Soil management.
4. Farm equipment.
5. Land tenure.
6. Farm improvements.

Marketing Plant Products—
1. Determine when to sell cotton and grain sorghum.
2. Determine where to sell cotton and grain sorghum.

Marketing Animal Products—
1. Determine when to market dairy, beef, sheep, hogs, and poultry products.
2. Determine how to market dairy, beef, sheep, hogs, and poultry products.

1927–28	1928–29	1929–30
FIRST	SECOND	THIRD
One Dairy Cow For milk production	One Dairy Cow For milk production	Two Dairy Cows For milk production
	One Calf	Three Calves
	Start One Acre of Sudan	One Acre Sudan Patch
		Start Five Acres of Grain Sorghum
Supplementary Farm Practice not in Project	Supplementary Farm Practice not in Project	Supplementary Farm Practice not in Project

The purpose of the agriculture course in Abernathy High School, as well as in any Texas high school, is to prepare boys to meet the various problems which make up the work of the farm.

This department in our school offers a three-year course in agriculture. We endeavor to get the boys to see the need of a three-year project program, since a long-time project will be worthwhile in that period of time.

The boys have one major project, a contributory project, and a minor project.

In the school year 1930–31, the class will have a project consisting of 40 acres of certified hegari. The purpose of this project is to train boys who live in town to carry out a worthwhile project.

The department attempts to get the boys to select projects which represent a cross-section of farms in the community in which they are primarily interested.

Ton Litters in Ohio

THE Ton Litter Contest promoted for several years by the agricultural extension service in Ohio, particularly for farmers and vocational students has been superseded by the pork production and herd management contest for the farmers. It is being continued, however, as a contest for vocational students and club boys only. Five hundred and forty-four litters have been entered by all-day and part-time students of vocational agriculture in 91 schools according to Professor J. W. Wuichet of the agricultural extension service. Marion County leads with 150 entries. The leading department reports 103 entries from 19 students. One department produced 12 ton litters last year and 22 the past two years.

That Public Speaking Contest

NEARLY every Future Farmer publication that comes to our desk tells about local and state F. F. A. public speaking contests. Senator Capper may well be gratified at the response of the farm youth of the nation in this contest. Soon we shall have boys participating in the four regional contests and then in November the four regional winners will be heard at the F. F. A. National Congress at Kansas City. The local, state, and national contests mean a whole lot of public speaking practice for F. F. A. boys.

J. G. Lee Made Dean

PROFESSOR J. G. Lee, Jr., head of the department of agricultural education of the University of Louisiana in recent years, has been named dean of the College of Agriculture at that institution. Professor Lee has been spending the past quarter in study at Iowa State College, working with Professor W. H. Lancelot in preparation for the new duties he is assuming.

Future Farmers of America

F. F. A. of Reidville, South Carolina, Has Good Program

THRU the splendid leadership of J. G. Jones, teacher of agriculture and thru the co-operation of the boys, one of the best organized chapters of Future Palmetto Farmers in South Carolina has been developed at the Reidville High School in Spartanburg County.

Mr. Jones states that each boy purchased a copy of the Future Farmers of America Manual at the beginning of this school year. With this manual, the secretary's minute book, and $5.50 a dead chapter has come to life again and functions so that farmers are wanting not only to be honorary members but active members. Two meetings are held each month in the agricultural classroom. At one of these regular monthly meetings some outside farmer or business man makes a talk to the group. At the other meeting the program is put on with all boys serving, and they are real anxious to take part on the program. The secretary has a large Journal in which all records and minutes are kept and can be referred to for years to come.

The room is put in regular order and the president has at his back a large blue banner. It has on it F. F. A. and the rising sun. At each of the six officers' stations blue stands are provided and on the side of each of these are the letters F. F. A. On the president's stand is a gavel. On the vice-president's stand is a small walking plow. The secretary's stand is mounted with an ear of corn A picture of Washington decorates the treasurer's stand. On the reporter's stand is the United States flag and on the adviser's stand is an owl.

Evidently this chapter is going about its work very thoroly and systematically. These people are learning some real parliamentary procedure.

A scrap book has been started in which pictures, newspaper clippings and other features of the organization are kept.

These boys maintain a good amount of money in the treasury. They make quite a bit of money each year from their Halloween party, F. F. A. and home economics supper, and father and son banquet.

The following are the objectives set up by the Reidville chapter for the year 1930–31:

(1) Make the department serve the community better and have a better department.
(2) Hold a father and son banquet.
(3) Arrange and conduct project tours.
(4) Enter teams in judging contest.
(5) Aid in arranging for evening classes for farmers.
(6) Arrange for a thrift program and organize a thrift bank.
(7) Have a definite program of work for each member.
(8) Develop leadership thru activities.
(9) Make farms of members more attractive and modern.
(10) Arrange for chapter debates.
(11) Study parliamentary law as a procedure in conducting meetings.
(12) Hold joint meetings with other chapters.
(13) Discuss one of the aims of the F. F. A. at each meeting.
(14) A church and Sunday School record of 50 percent or more.
(15) Hold open meetings for farmers and others who are interested in agriculture.
(16) Elect honorary and associate members each year.
(17) Send delegate to State Fair school.
(18) Raise money for benefit of chapter.
(19) Have all the regalia needed by the chapter and use F. F. A. Manual.
(20) At least 50 percent of the boys go to the F. F. A. camp at Tamassee.

INSPIRATION

I am a Future Farmer
In thought, in word, in deed;
I trust in farming's future,
I rise to country's need.

In all the ages past
When people rose to fight,
Who held the line at home?
The farmer in his might.

Who is it holds today
The nation in their hands?
Who feeds the world? The farmer,
The gardener of God's land.

So I'm sure you understand
The urge within my soul;
To go ahead in farming ways;
To try to reach my goal.

Oh ancient task of ancient men
What power is in the soil!
The very essense of its breath
Inspires my daily toil.

—Charles B. Mathis, Jr., President, Athens, Kentucky, Chapter, F. F. A.

New Jersey F. F. A.'s Issue a Magazine

DURING the school year 1923–24, the Future Farmers of New Jersey issued a mimeographed booklet entitled, *The Future Farmer*. Since that time, the boys of that state have issued four F. F. A. Yearbooks. This year they have gone back to the smaller publication and we now find on our desk a 12-page magazine that carries the original title, *The Future Farmer*. The magazine includes state and chapter news notes and a few general articles. Quoting from the editorial page we find: "The best way to develop leadership among boys is to have them participate in various activities. Thus, when the New Jersey branch of the organization planned this publication, it was decided to make it the work of the boys themselves. The various articles have been contributed by the local chapters and these have been edited by the state reporter, Dick Kamper of Central High School, Paterson."

We are informed that copies of this edition of *The Future Farmer* may be had upon application to Alexander Hill, Jr., president, New Jersey Future Farmers of America, Salem, New Jersey.

Boys Can Be Trusted

DONALD PHARIS,
Richmond, Missouri

I FIND it pays in shop work to let the boys know that the shop with all its tools and equipment is their very own, to use any time they want to and can. I never check out tools to the boys, and after 10 years of experience have had almost no losses from stealing.

At the beginning of the year the boys elect a tool manager, whose business it is to see that the tools are returned at the end of shop periods to their proper places, and in proper condition. That takes a big load off the teacher. I used to check up on the tools every day myself; it's a big worry to the teacher, but a fine responsibility for the boy, and good training.

My boys are encouraged to work Saturdays and after school in the shop, and their teacher is rarely around to help or supervise them. Boys are intrinsically honest, I believe; especially if they know they are trusted, and that the shop with all its equipment is their own, to use and care for as they would personal property.

F. F. A. President Broadcasts Radio Message

THE Future of the 'Future Farmers of America'" was the subject of a radio talk given June 8, by Leslie Fry, of Louisiana, Missouri, president of the Future Farmers of America, the national organization of boys enrolled in vocational agriculture courses in the United States. Fry's talk was given during the Farm and Home hour of the National Broadcasting Company, from 1 to 1:15 p. m., Eastern Standard time.

In his radio talk Fry outlined the aims and purposes of the Future Farmers of America and told how the 60,000 boys who are now members of this organization are profiting by their membership. He broadcast his message from the studio of Station WRC, Washington, D. C., where he attended a meeting of the executive committee of the Future Farmers of America, held at the headquarters of the Federal Board for Vocational Education.

Future Farmers Learn Co-operation

W. H. EVANS,
Adviser

THE Future Farmer Chapter at Salem, New Jersey, is a live chapter. One of their objectives this year is a co-operative egg marketing plan that ties up very well with the project work of the department, the Farm Management course, and at the same time gives the boys an opportunity to learn co-operation by practicing it.

Briefly the plan is as follows: All the boys who produce eggs in their poultry projects sell them thru the F. F. A. co-operative association. Standards have been set up which include wired dropping boards, sterile eggs, careful handling, candling, and grading. The boys bring the eggs to school each Thursday morning where they are graded, cleaned, and cartoned. They are delivered to retail customers during the noon hour on the same day.

The customers were secured by means of circular letters, newspaper advertisements, school exhibits, articles in the school paper, and personal solicitation.

Following is a copy of a recent article in the school paper, The Salem Oak:

EGGS, EGGS, EGGS

Many students have noticed the eggs on the table in the hall and have wondered what the display of "hen fruit" meant. The writer on inquiring of Mr. Evans, the "Ag" instructor, has some important news for you. Here it is:

Three months ago an egg project was started by the F. F. A. boys in the "Ag" department. The first week, 31 dozen eggs were sold. Slowly but surely the number of eggs sold increased. Now the boys are selling an average of 50 dozen per week.

The boys gather their eggs daily and turn them in on Thursdays. Then they are cleaned and graded according to size. Each egg is weighed and all weighing less than 22 ounces per dozen are excluded. The remaining eggs are classified into two grades. Those weighing between 22 and 24 ounces per dozen are classified as Extra Firsts. Those weighing between 24 and 28 ounces, but averaging over 26 ounces, are called the F. F. A. Specials. Next the eggs are candled to eliminate blood spots and to examine them for quality. Lastly they are hand selected for uniformity in color and are placed in cartons.

A detailed record of each boy's production is kept and he is reimbursed accordingly. Five percent is set aside for distribution and 5 percent for handling charges, paying for cartons, losses, and bad debts.

Such is the story of the eggs in the hall. Any one wishing good, fresh, wholesome, clean, pure chicken eggs, just place your order in the hands of Mr. Evans or any F. F. A. member.

The summary of sales for one month shows some very interesting results. The prices received were: F. F. A. Special Browns, 65 cents; Special Whites, 65 cents; F. F. A. Medium Browns, 60 cents; F. F. A. Fancy Mixed, 60 cents. Number dozen delivered, 198. Number dozen sold at school, 18. Total sales, 206 dozen. Price paid to boys, 50 cents. Average wholesale price in Salem, 40 cents. Average retail price in Salem stores, 45 cents. Net profit to F. F. A. Chapter, $19.89. Estimated sales for next month, 240 dozen.

Mr. Evans, commenting on this co-operative work of the boys, says, "It is a fine teaching device in farm management, not so much from the dollars and cents standpoint, but from the reaction of the boys in their class work and also in the F. F. A. The advantages briefly are: (1) The ready market for the product stimulates interest in project work; (2) it is a practical example of co-operation and stresses assembling, handling, advertising, and so forth; (3) it emphasizes the importance of consumer demand (we had to reduce white eggs 5 cents below browns to move them); (4) the boys are learning that the public appreciates quality and is willing to pay for it.

Famous Educator Talks to Future Farmers

DR. J. E. RUSSELL, former dean of Teachers College, Columbia University, operates a fine Guernsey farm near Lawrenceville, New Jersey. Wishing to take advantage of the excellent animals for dairy judging practice preparatory to selecting the state team that will go to the National Dairy Exposition in October, some sixty F. F. A.'s from 20 schools spent a Saturday early in June at this farm. The morning was devoted to placing rings of dairy animals and the afternoon to a study of Guernsey type as outlined by Dean Russell. With 25 years' experience as a breeder of high type Guernsey animals, coupled with his masterful scientific knowledge, Dean Russell can and did give a most excellent presentation that will surely function in the lives of the boys. It is seldom that we find a prominent educator and a breeder of fine livestock in the same man and when we do, Future Farmers will do well to take advantage of the combination.

Dr. J. E. Russell, formerly Dean of Teachers College, Columbia University, talks to the New Jersey Future Farmers on breeding dairy animals

F. F. A. Is Worthwhile

R. B. JEPPSON,
State Supervisor, Nevada

BASED on experiences in Nevada for the past three years, it may be safely said that the organization of Future Farmers of America is one of the greatest assets the vocational agriculture teacher has for conducting a successful program.

One of the outstanding advantages has been in securing a larger enrollment of high class farm boys and the elimination of the uninterested student. The reason for this is that F. F. A. members are anxious to secure new active candidates for their chapter. They do not want the individual who will not contribute something to the organization.

New candidates are informed of the requirements for advancement and thereby are made acquainted with the need for a good supervised farm practice program. The new student is interested in becoming a member of the gang and therefore takes more interest in project work. This has made it much easier for the teacher to sell him the idea. As a rule the F. F. A. chapter is the liveliest organization in school.

Some of the most successful teachers are directing the boys to set up definite project objectives in their annual activity programs. This has included, size of projects, production standards, complete and accurate records and plans for continuation of work. Combined with this the chapter completing the best supervised practice or project program is awarded a large trophy cup. In this connection instances have been known where F. F. A. members have been influential in persuading different members to do better work.

For developing co-operative activities among the class members it is also serving its purpose. Such things as chapter projects, meetings, assembly programs, dances, parties, plays, and father and son's banquets bring the boys closer together and gives them something besides study and work on their projects. In the main these activities are directed and handled by the boys. They help to attain one of the major objectives in education, that of "The worthy use of leisure time."

Again it creates a desire for community service. Two chapters last year set out to improve the school grounds. Lawns and trees were planted, cement walks laid, and unsightly rubbish removed. They also enlisted in a campaign to eradicate the noxious puncture vine from the community. When boys do things because they want to do them the results are much greater than when they do them because it is an assigned task by the teacher.

The F. F. A. chapter activities properly directed will entirely eliminate any disciplinary problems for the teacher. The boys can be given greater responsibilities and likewise greater freedom.

There is hardly a problem the teacher of agriculture is confronted with that cannot be at least partially solved by the F. F. A. organization. The teacher who fails to take advantage of these situations will certainly be confronted with a more difficult job in his teaching work. In every instance where there is a good active F. F. A. chapter, there also can be found first class programs of agricultural education.

F. F. A. Booklet From Georgia

THE Georgia Association of Future Farmers of America is to be congratulated on the fine booklet recently published that tells of the aims, objectives and activities of their association. In the Foreword, Paul W. Chapman, State Director of Vocational Education, gives as the purpose of the booklet the following:

"Thomas A. Edison says that 90 percent of a man's success in life depends upon his willingness to work. This may be correct. But a thought equally as interesting is—what is it that enables one person to work more effectively and more happily than another? It is difficult to say.

"There is something, however, which we sometimes speak of as 'spirit' and sometimes s morale' which seemstoa' have a marked effect upon the efforts of individuals and groups. How this inspiration, vision, motivation (call it what you will) is created it is difficult to say; but this we know—it grows out of an individual's relations with his fellow men.

Farm boys, perhaps more than any other group, need this stimulating influence. They need to develop pride in their work, interest in their community, and confidence in themselves. This is just what the Future Farmers of America, a nation-wide organization of farm boys who are studying vocational agriculture, is doing for the farm boys of the United States.

"According to Arthur M. Hyde, secretary of agriculture, the Future Farmers of America is the most hopeful sign of progress among our farm population.

"The boys in Georgia who are studying vocational agriculture have formed a state association which is affiliated with the national organization and known as the Georgia Association of the Future Farmers of America.

In a great agricultural state like Georgia, where our farm population is rapidly decreasing, such an organization is destined to exert a marked influence on agriculture, and eventually upon the welfare and prosperity of the state. It is for the purpose of explaining the work of this state-wide organization of vocational boys that this bulletin has been prepared. It is designed to convey information to the public and serve as a helpful guide to teachers of vocational agriculture and their pupils."

The edition of this booklet is probably not large enough to supply local advisers outside of Georgia, but state advisers have copies and it is suggested that local advisers examine these copies when possible to do so. Many good ideas for the benefit of local chapters will be found in the booklet.

Future Farmers Market Thru Co-ops

THE Future Farmers of Tennessee are marketing cotton thru the Mid-South Cotton Growers Association at Memphis. The Association extends the same privilege to the Future Farmers of Arkansas. The membership in the association is given to a local chapter and the members who care to can market their cotton thru this membership. Any chapter specially interested in this proposition should write to the Mid-South Cotton Growers Association at Memphis, Tennessee, and ask for further information.

F. F. A. Executives Map Plans for 1931 Congress

A MEETING of the executive committee of the Future Farmers of America was held at the headquarters of the Federal Board for Vocational Education, Washington, D. C., Friday and Saturday, June 5 and 6.

This meeting was called for the purpose of formulating plans for the Fourth Annual Congress of the Future Farmers of America, to be held in Kansas City in November.

Those who attended the meeting include Leslie Fry of Louisiana, Missouri, president; Malcolm Wilkins, Troy, Pennsylvania, student secretary; Joe Henry Gardner, Holland, Virginia, second vice-president; William Showalter, Mishawaka, Indiana, third vice-president; Henry Groseclose, Blacksburg, Virginia, treasurer; Dr. C. H. Lane, national adviser; and W. A. Ross, executive secretary, both of Washington, D. C.

Future Farmers Save Life at Hillsboro, North Dakota

THE boys and I were out judging livestock on a nearby farm here recently. As we were leaving the farm, I sent one of the boys to thank the farmer and tell him we would be out again soon to judge dairy cows. When the boy reached the silo where the man was digging out the ensilage he found that a 12-foot cliff of it had caved in and buried the farmer under it. The boy ran out and called us. We dug him out with our hands in about 10 minutes, altho it seemed like an hour to us. He was still alive and we soon revived him. The doctor came and found the man had fractured his leg near the hip. Such experiences are not welcomed on our judging trips, but it gave the boys some valuable training in thinking and acting in an emergency.—Donald Andrist, Hillsboro, North Dakota.

F. F. A. Chapter Mixes Minerals

E. E. MORRISON,
Adviser

THE Hartford, South Dakota, chapter of the F. F. A. believes in getting things done. Learning from their animal husbandry work that a home-mixed mineral mixture for hogs will give good results, and further, that it is usually much cheaper than a commercial mixture, the boys decided to purchase and mix the materials for a mineral mixture for use in their project work and incidentally to supply some of the mixture to farmers.

They secured a formula from the Iowa Experiment Station, which was followed with a slight modification. They combined their orders and solicited some of their neighbors for orders. In one day they had an order for 9,000 pounds of material. The order was showed to the local banker and he loaned the chapter $150 to finance the enterprise. Prices of the different ingredients were secured from several sources before the order was placed.

The entire 9,000 pounds were mixed in 8 hours, using a cement mixer operated by an old gasoline engine that had been given to the boys to use, provided they could make it run.

The mixture was sold at $2.50 per 100 pounds in less than 500-pound lots, and at $2.40 per 100 pounds in 500-pound lots or over. A net profit of $69.30 was realized by the chapter, which will be used to finance the expense of the livestock judging teams to the state contest.

The formula used was:

	Pounds
Salt	20
Steamed bonemeal	35
Charcoal	5
Limestone	38
Iron oxide	2
Potassium iodine, ½ ounce per	100

The expenses and receipts were:

Expenses—	
Bonemeal, 3,200 lbs.	$ 64.00
Charcoal, 450 lbs.; limestone, 3,450 lbs.; iron oxide, 200 lbs.	60.00
Salt, 1,890 lbs.	13.20
Trucking	5.00
Gasoline for engine	.35
String for tying sacks	.15
Interest on money	.45
Mileage to boys	8.34
Total Expenses	$151.50
Receipts	$220.80
Net Profit	$ 69.30

Ability+Co-operation=Results

YEAR after year, for a number of years, Laflin, the county agent, and Hall, the vocational agricultural teacher, have been doing remarkable work with corn in Jasper County, Iowa. Last year, they induced over 200 farmers to grow an improved strain of Krug corn in comparison with their home sorts. One hundred thirty-four of these farmers stayed by this experiment to the finish, and had the two kinds of corn weighed up and tested for moisture. At the finish, the farmers' home corn yielded an average of 53 bushels per acre and the Krug corn 57 bushels. A lead of four bushels per acre means that each bushel of this special strain of Krug seed would have increased the yield about 28 bushels (assuming seven acres to a bushel of seed corn). Of course, there were a number of instances where the farmer's home corn beat the special strain of Krug, but in most of these cases, the farmer already had a strain of Krug corn of his own. Jasper County plants each year about 150,000 acres of corn, and I would estimate that the work which Laflin and Hall have already done has increased the annual yield in Jasper County by a total of over 300,000 bushels. Further improvements totaling to more than half a million bushels are easily in prospect. The business men of Newton who have co-operated with Laflin and Hall in their corn project will undoubtedly get their money back many times over.—Henry Wallace, *Wallaces' Farmer*, January 24, 1931.

National Contest Winners for 1931

1. Best F. F. A. Chapter?
2. Best Public Speaker?
3. Star American Farmer?
4. Best State F. F. A?

New Text on Evening and Part-Time Courses

Teaching Evening and Part-Time Classes in Vocational Agriculture; G. A. Schmidt and W. Arthur Ross; The Century Company, New York (1931).

Teachers of agriculture will welcome this book which offers valuable aid in organizing and teaching classes of students who have in the past been neglected by authors as well as by teachers and school administrators. The authors have compiled in this book some of the best thinking in the field.

The section on evening classes by Schmidt includes helpful suggestions on preparing material for classes conducted on the conference basis, illustrations of a conference leader's operating sheets, and methods of tabulating data concerning practices of members of the group.

Ross in his discussion of part-time work, stresses the importance of this part of the vocational program. He emphasizes the necessity of making a thoro survey of all out-of-school farm youths. Specific suggestions are given on selling the idea to school administrators on securing enrollment, and on teaching methods.

Readers will agree with the authors that too little emphasis has been given in the past to supervised practice work in these classes. Some may not agree with all of the specific suggestions for reporting this work but the two chapters on this subject as well as the rest of the book are well worth reading by everyone interested in the vocational agriculture program.—*J. B. McClelland, Ohio.*

Related Mathematics

Carpentry Mathematics, Part I, by J. Douglas Wilson and Clell M. Rogers, published by the McGraw-Hill Book Company, Inc., 370 Seventh Avenue, New York. Two sections, 9 chapters, and 232 pages. Well illustrated, clear print, and good binding.

This book assumes that a student to be successful in carpentry must have a clear understanding of the fundamentals of mathematics. The purpose of *Carpentry Mathematics* is to fulfill such a need. This book properly used should be a fine aid to the teacher who desires to have his students understand the mathematical fundamentals of farm construction.

The nine chapter headings follow: The Wood Working Field, Decimals, Whole Numbers, Fractions, Percentage, Mensuration, Lumber and Board Measure, Arithmetical Review, and Tables and Formulas. Eight hundred twenty problems are listed, each one applying to an actual trade situation. A key chart at the beginning of each chapter gives the content in logical outline. Trade facts needed in solving the problems are written in small print making it convenient for teacher and student.

The resourceful teacher of vocational agriculture will find this book of special value in enriching his farm mechanics courses.—*L. J. Schmitz, Kansas.*

The subject matter taught is far less important than are the methods of thought acquired in the study of subjects.—*C. H. Judd.*

Another Field Crops Text

Farm Crops Projects, by W. L. Burlison and A. W. Nolan; The Macmillan Company, New York; 1930; 458 pages, $1.72. (Agricultural Project Series, edited by Rufus W. Stimson.)

Successful supervised farm practice work depends largely upon the vocational students' ability to lay out a definite program of work to be done and to anticipate and plan for the problems and operations involved in carrying his program thru to completion. To give the student valuable information and guidance to these ends has been the aim of the authors in preparing this new book, "A guide in studying and conducting farm crops projects, or other supervised farm practice."

Students planning crop projects will find that standard practices and procedures in farming operations have been clearly outlined for important farm crop enterprises, supplemented by concise statements of the related factors and principles involved in management problems. The estimated financial budget is emphasized as an important feature of project planning. Accurate and businesslike record keeping is stressed. Pertinent "check-up" questions and study suggestions are given at the end of each section. These should guide the student in broadening his knowledge of agriculture and in rounding out his project plans in the light of his home farm and community conditions. The curriculum calendar, or seasonal distribution of farm work with study suggestions, has been used successfully by Illinois teachers and students for several years and should be suggestive for those in other states.

Its simplicity of organization, its concise, explicit statement of subject matter, and its emphasis upon doing the job with understanding, makes it appear especially well suited for the purposes set up. Its usefulness for certain regions would have been improved by including chapters on other crops, as flax, tobacco, and cotton.—*L. L. Scranton, North Dakota Agricultural College.*

County Vocational Program Effective

C. R. WILKEY,
District Supervisor,
Conway, Arkansas

RESULTS obtained from a county-wide vocational agriculture program in several Arkansas counties indicate that the establishment of Smith-Hughes agriculture courses in the rural high schools enables farm boys to contribute very materially to the family income and remain in school regularly completing their literary subjects as well as vocational subjects. Faulkner County is a notable example where this has been accomplished by supplanting part of the cotton acreage with other enterprises such as poultry, dairying, bees, and pork, which the boys can take care of before and after school hours.

Records of vocational agriculture work in Faulkner and Conway counties show just what a county vocational agriculture program means to farm boys and to farming communities. In Faulkner County there are over 500 boys in training annually in vocational agriculture courses which means that a well trained farm manager will be available for each of the 4,500 farms which changes hands at the approximate rate of five percent annually. In addition to work with the boys, over 125 adult farmers attend evening school classes and keep complete farm accounts.

Examples of the type of trainee produced in these schools may be found in Carldon Patton, star farmer of America in 1929, who is taking further agriculture training and is a successful breeder of Jersey cattle and Duroc Jersey hogs. Also in Otwell Stivers of Enola, recently declared Faulkner County's champion boy farmer of 1930 who in this his third year of his Smith-Hughes agriculture conducted 12 farm enterprises under drouth conditions and made a project labor income of $851 and passed a year's high school work creditably. Young Stivers raised White Leghorn chickens, Poland China hogs, Laredo soy beans, Italian bees, and registered Jerseys. Proper labor distribution, high quality of product, close application to good practices, and accurate cost account records enabled him to win out over drouth conditions.

A vocational agriculture class of 13 high school boys in the Vilonia high school where F. M. Bollen is agriculture teacher averaged a project labor income in 1930 of $251 per student from their farming operations while attending school regularly. On 35 acres of cotton this group of future farmers lost $52 but with 84 acres of feed and truck crops and 20 head of high producing dairy cattle and swine they were able to overcome the drouth conditions.

By county-wide organization and development of the Future Farmers of America, the county adviser has been able to secure co-operation in purchase, production and exhibiting of registered cattle and hogs at the 1930 Arkansas State Fair where the Faulkner Future Farmers entered several divisions and won over $700 in prizes in competition with the best herds of the state. Over 200 boys entered the 1930 state three-acre cotton and corn contests sponsored by the Chilean Nitrate Company and the Mid-South Cotton Association, winning five gold watches this year. A county organization of the F. F. A. sponsors an annual county-wide father and son banquet in co-operation with the boy scouts, a county public speaking contest leading to the state contest conducted by The Arkansas Farmer, and a series of county crop and livestock production contests in which over $300 in prizes are awarded annually by Conway banks, service clubs, and business firms. Thru co-operation of the banks and the Browne Seed Company of Conway a program of seed growing is now being developed thru the Future Farmer boys and it is expected that much of the cotton, corn, and legume seed will in the future be grown by these boys in order to keep more Arkansas money among Arkansas farmers.

No one is fit to be a teacher in whose own mental process education has ceased to go on. One is a student first and only incidentally a teacher. The best teacher is the seeker after truth among his students. — *Everett Dean Martin.*

Success in life does not depend upon the number of hours we work. It depends upon the concentration of the mind and the drive put into our work. —*Dr. L. H. Gulick.*